

ABSTRACT**GAZE TRACKING SYSTEM**

A gaze tracking system (1,3,8) is provided which obtains
5 images of an operator (9) and processes the images to
associate the images with coordinates of where the
operators gaze is directed towards.

10 In order to identify images where an operator is looking
in the same direction, images obtained by a camera (8)
are first processed using the retinex algorithm. Image
patches from the processed image are then compared with
stored feature images and an initial classification based
15 upon the correspondence between areas of the processed
image and the stored feature images is determined. This
initial classification is then further processed and each
image is assigned a single classification. The areas
identified by different classifications are then
determined so that classifications assigned to adjacent
20 images identify points closer together and
classifications never assigned to an adjacent images
identify points further apart.